

PHILIPPINES National Report to the Scientific Committee of the Indian Ocean Tuna Commission, 2021

Mr. Eduardo B. Gongona
Ms. Drusila Esther E. Bayate
Mr. Sammy A. Malvas
Atty. Benjamin Felipe S. Tabios Jr.
Mr. Rafael V. Ramiscal
Atty. Michael Andayog
Mr. Severino Escobar, Jr.
Mr. Peter Erick Cadapan
Mr. Beverly San Juan
Ms. Jennifer G. Viron
Mr. Marlo B. Demo-os
Mr. Isidro Tanangonan
Ms. Maria Joy Mabanglo

BUREAU OF FISHERIES AND AQUATIC RESOURCES



INFORMATION ON FISHERIES, RESEARCH AND STATISTICS

<p>In accordance with IOTC Resolution 10/02, final scientific data for the previous year was provided to the Secretariat by 30 June of the current year, for all fleets other than longline [e.g. for a National report submitted to the Secretariat in 2019 final data for the 2018 calendar year must be provided to the Secretariat by 30 June 2019)</p>	<p>N/A</p>
<p>In accordance with IOTC Resolution 10/02, provisional longline data for the previous year was provided to the Secretariat by 30 June of the current year [e.g. for a National report submitted to the Secretariat in 2019, preliminary data for the 2018 calendar year was provided to the Secretariat by 30 June 2019).</p> <p>REMINDER: Final longline data for the previous year is due to the Secretariat by 30 Dec of the current year [e.g. for a National report submitted to the Secretariat in 2019, final data for the 2018 calendar year must be provided to the Secretariat by 30 December 2019).</p>	<p>N/A</p>



There were no active Philippines Vessels on the IOTC Convention Area (from 2018 to present).

Executive Summary

There were no active Philippines Vessels on the IOTC Convention Area (from 2018 to present). In 2017 (07 October to 19 December), the Philippines had only one active vessel in the IOTC Convention Area (10° S to 5° N – 075° E to 090° E), the FV Marilou 888, a purse seiner, with a GT of 349. During the fishing operations, a total of 25,551 kg bigeye, 72,680 kg yellow fin and 144,566 kg skipjack were caught and all catches landed in General Santos City Fish Port, Philippines. There were also 34 Silky Sharks (FAL) encountered during the trip, 12 of which were released alive and 22 released dead (no sharks were retained in the vessel). In addition, one olive ridley turtle (LKV) which was released alive and one smooth tail mobula (RMO) which was released dead were recorded. The entire trip of the FV Marilou 888 was 100% observer covered and the vessel was VMS equipped. As with previous operations of the Philippines Fishing Fleet, the mandatory application of the conservation and management measures for sharks and other species was observed during the operations of the vessel.

1. BACKGROUND/GENERAL FISHERY INFORMATION

Tuna fishing in the Philippines involves both municipal (< 3GT) and commercial (>3GT) fishing vessels. There are fishing boats and fishing vessels operating in Philippine waters as well as other coastal states and high seas in both the Indian and Pacific oceans.

The oceanic tunas are caught by municipal handline/hook & line, troll line and gillnet among others that are operating in municipal waters. Small-scale and medium-scale commercial (3.1-150 GT) are purse seine, ringnet and handline primary fishing boats that fish beyond municipal waters and the EEZ. A limited number of Philippine-flagged purse seine/ring vessels (36 catchers) not more than 250 GT operate in the high seas pocket 1 (HSP1 in the Western Pacific) under the WCPFC CMM 2017-01 measure. Relatively larger vessel/large purse seine vessels (>500GT) operate in other Pacific island countries. A small number of Philippine-flagged tuna longline vessels also operated in WCPO and Indian Ocean (IO) in previous years. However, there has been no active longline fishing vessel since 2015 in either ocean.

2. FLEET STRUCTURE

Municipal tuna fishing boats fish both in municipal waters (within 15 km) and beyond. The fishing gears are mainly hook & line, drift gillnet and trawl line. Municipal tuna fishing is carried out nationwide, with important fishing grounds in Sulu Sea, Moro Gulf/Celebes Sea, Pacific Seaboard including archipelagic waters of Lagonoy Gulf, Albay Gulf, Davao Gulf, Davao Oriental, West Philippine Sea, and in the Provinces of Antique, Mindoro, Zambales, Ilocos Norte and Ilocos Sur.

Though the Philippines has a list of purse seine authorized with the IOTC, these have remained inactive. It operates mostly a fleet of long line for the past years. The main target species is bigeye tuna. In the past five years however, the country has only one active vessel in the IOTC Convention Area (10° S to 5° N – 075° E to 090° E), the FV Marilou 888, a purse seiner, with a GT of 349. The vessel was only active from 07 October to 19 December 2017.

Table 1: Number of vessels operating in the IOTC area of competence, by gear type and size

	Number of Vessel	Gear type	Size
2006	16	Tuna Longline	284 GT - 930 GT
2007	17	Tuna Longline	284 GT - 930 GT
2008	17	Tuna Longline	284 GT - 930 GT
2009	7	Tuna Longline	382 GT - 930 GT
2010	8	Tuna Longline	382 GT - 930 GT
2011	3	Tuna Longline	382 GT - 930 GT



2012	14	Tuna Longline	382 GT - 930 GT
2013	9	Tuna Longline	382 GT - 930 GT
2014	4	Tuna Longline	382 GT - 930 GT
2015-2016	0	N/A	N/A
2017	1	Purse Seine	349 GT
2018-2020	0	N/A	N/A

3. CATCH AND EFFORT (BY SPECIES AND GEAR)

Table 2. Annual catch and effort by gear and primary species in the IOTC area of competence (Year: 2013-2017-no active fleet on 2015&2016):

Year : 2013

Species	Gear	Quantity	Effort (hooks)	Latitude/Longitude
				5x5
Bigeye	LL	911,595	2,445,146	00N - 50E
				05N - 60 E
				5 N - 55E 5 N - 65E 0 S - 55E 0 S - 65 E

Year : 2014

Species	Gear	Quantity	Effort (hooks)	Latitude/Longitude
				5x5
Bigeye	LL	319,001	677,875	00 N - 50 E
				15 N - 55 E
				00 S - 50 E 00 S - 55 E

Year : 2017

Species	Gear	Quantity(kg)	Effort (days)	Latitude/Longitude
				5x5
Bigeye	PS	25,551	54	10° S to 5° N - 075° E to 090° E
Yellowfin	PS	72,680		
Skipjack	PS	144,566		

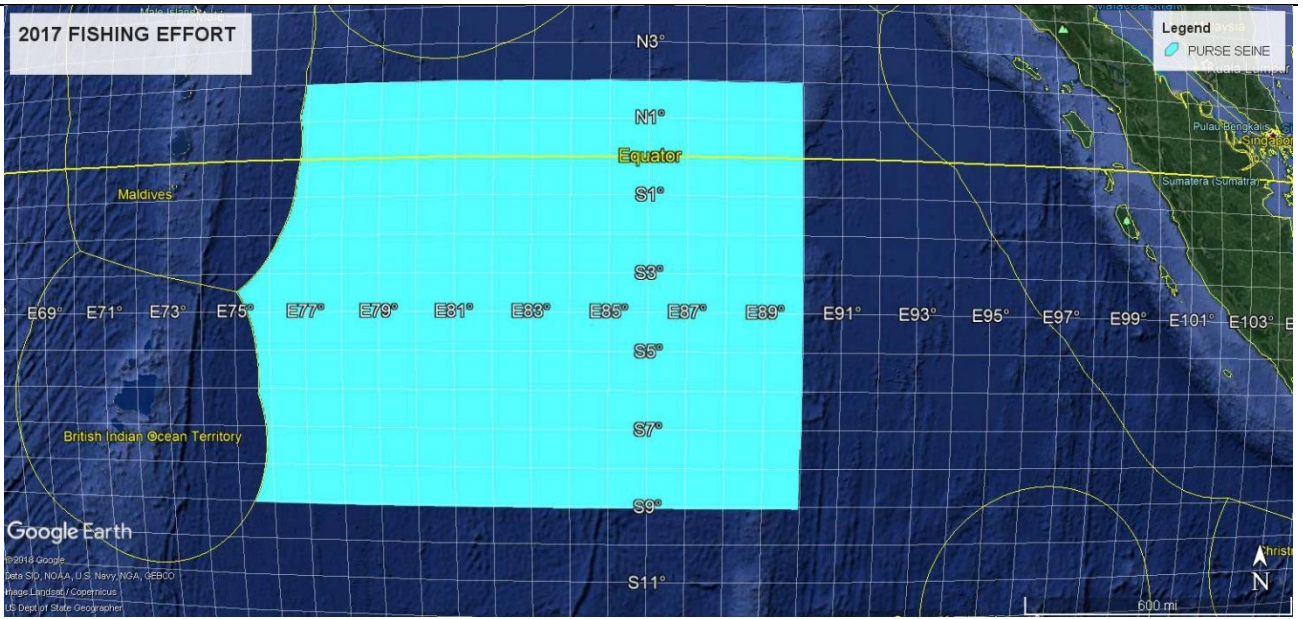


Figure 1. Map of the distribution of fishing effort, by gear type for the national fleet in the IOTC area of competence

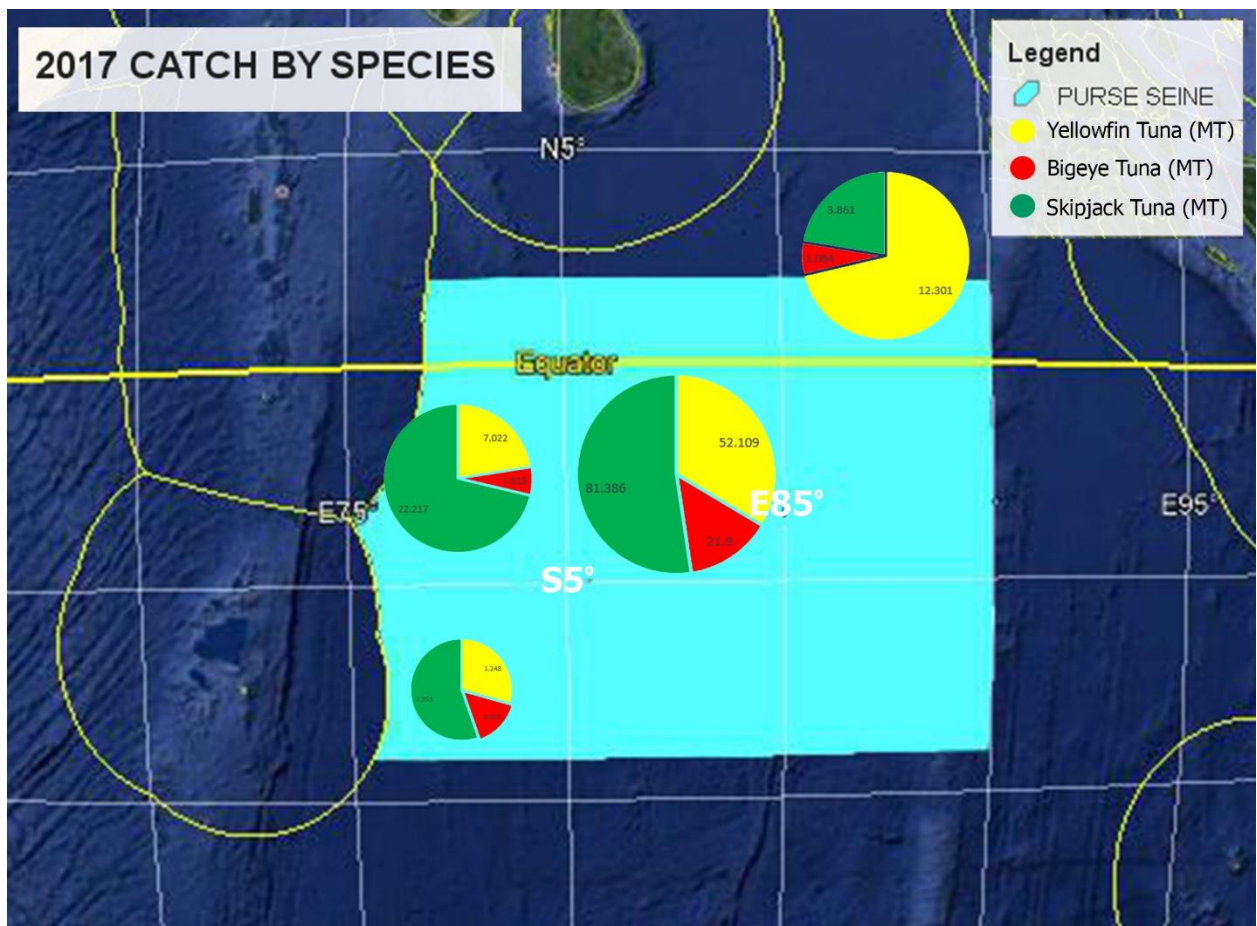


Figure 2. Map of distribution of fishing catch, by species for the national fleet, in the IOTC area of competence



Table 3. List of fishing catch by species for the national fleet, in the IOTC area of competence

Grid (Lat, Long)	YFT (MT)	BET (MT)	SKJ (MT)	TOTAL (MT)
00-05N, 085-090E	12.301	1.084	3.861	51.995
00-05S, 080-085E	52.109	21.9	81.386	155.395
00-05S, 075-080E	7.022	1.915	22.217	31.154
05-10S,075-080E	1.248	0.652	2.353	4.253

4. RECREATIONAL FISHERY

The Philippines is not engaged in this activity in the IOTC Convention area as the Philippines is not a coastal state in the convention area.

5. ECOSYSTEM AND BYCATCH ISSUES

5.1 Sharks [Mandatory]

This may not be applicable to the Philippine is not a coastal state in the IOTC Convention area. Nevertheless, we have submitted our NPOA on Sharks to the Science Manager. The NPOA on seabirds are still to be developed.

Table 4. Total number and weight of sharks, by species, retained by the national fleet in the IOTC area of competence

	Shortfin Mako	Blue Shark
2012	n/a	2,302 Kgs
2013	n/a	52,650 kgs
2014	n/a	n/a
2015-16	No active FV	n/a
2017	n/a	n/a

Table 5. Total number of sharks, by species, released/discarded by the national fleet in the IOTC area of competence . No sharks retained.

Year:2017

Gear	Species	No. Released Alive	No. Released Dead
PS	Silky Shark (FAL)	12	21

5.2 Seabirds

Legislation on the mandatory application of conservation and management measures that are adopted by the various Regional Fisheries Management Organizations [RFMOs] is now part of the law of the land as included in Republic Act 10654 in effective 2015.

5.3 Marine Turtles

Philippines advertise the use of circle hooks for LL fishing operations to reduce sea turtle bycatch as part of its activities in the Coral Triangle [CTI] initiatives). As early as November 15, 1979, the Philippine government through "MNR ADMINISTRATIVE ORDER No. 12, Series of 1979", declared the 7 islands located in Tawi-tawi as a protected area. For five islands the

government decided for special protection zones. Within this zones only scientific and conservation activities are allowed. In other zones there are certain rules in order to prevent too much impact by people on the environment and the turtles. Visiting these zones is only possible with strict guidance and under supervision of the staff of the officials of the government.

5.4 Other ecologically related species (e.g. marine mammals, whale sharks) [Desirable]

Whale sharks are protected by legislation in the Philippines. All PH flag PS vessels are prohibited from setting on whale sharks, if animal is sighted prior to commencement of the set. This species is also protected under the Fisheries Administrative Order 193.

Also, legislation on the mandatory application of conservation and management measures that are adopted by the various Regional Fisheries Management Organizations [RFMOs] is now part of the law of the land as included in Republic Act 10654 in effective 2015.

Table 6. Observed annual catches of species of special interest by species (seabirds, marine turtles and marine mammals) by gear for the national fleet, in the IOTC area of competence

Year: 2017

Gear	Species	Catch Weight (kg)	Catch Number	Action Taken
PS	Olive Ridley Turtle (LKV)	0.5	1	Released Alive
PS	Smooth tail mobula (RMO)	60	1	Released Dead

6. NATIONAL DATA COLLECTION AND PROCESSING SYSTEMS

6.1. Logsheet data collection and verification

BFAR Administrative Circular Number 252 Series of 2014 mandates the submission of catch logsheets. Under section 8 thereof, these are to be submitted on a monthly basis. Later these are verified through comparison of other sources of data.

6.2. Vessel Monitoring System

All Philippine flagged vessels operating in the high seas or in waters under the jurisdiction of other coastal state are covered by VMS. This is stated in Fisheries Administrative Order Number 241 Series of 2012 and BFAR Administrative Circular Number 252 Series of 2014.

6.3. Observer programme

The Philippines’ regional observer program commenced officially on May 2010 when the Western and Central Pacific Fisheries Commission Officially granted accreditation of its program. This became official required under Fisheries Administrative Order Number 240 Series of 2012. However, the preparation commenced a year prior with the WCPFC providing training assistance. In the years prior to 2015, the Observer Program was geared towards compliance with WCPFC requirements; there were no available observers for the IOTC operations. There is the matter of continuous training of additional observers, some of whom shall be deployed in the coming years to the IOTC area. For the year 2017, the Philippine flagged FV Marilou 888 which operated during the later part of the year 2017 (October 7 to December 19, 2017)-had a fisheries observer the whole time it navigated to the Indian ocean convention area, conducted fishing activities in the convention area until it navigated back to the Philippines. As result of the passage of RA 10654, observer coverage shall be in accordance with the rules of the Regional Fisheries Management Organization. (For FV Marilou 888, observer coverage was 100%)

Table 7. Annual observer coverage by operation, e.g. longline hooks, purse seine sets

Year	Gear Type	Observer Deployed	Coverage Period
2017	PS	1	7 Oct 2017 to 19 Dec 2017
2017	LL	0	

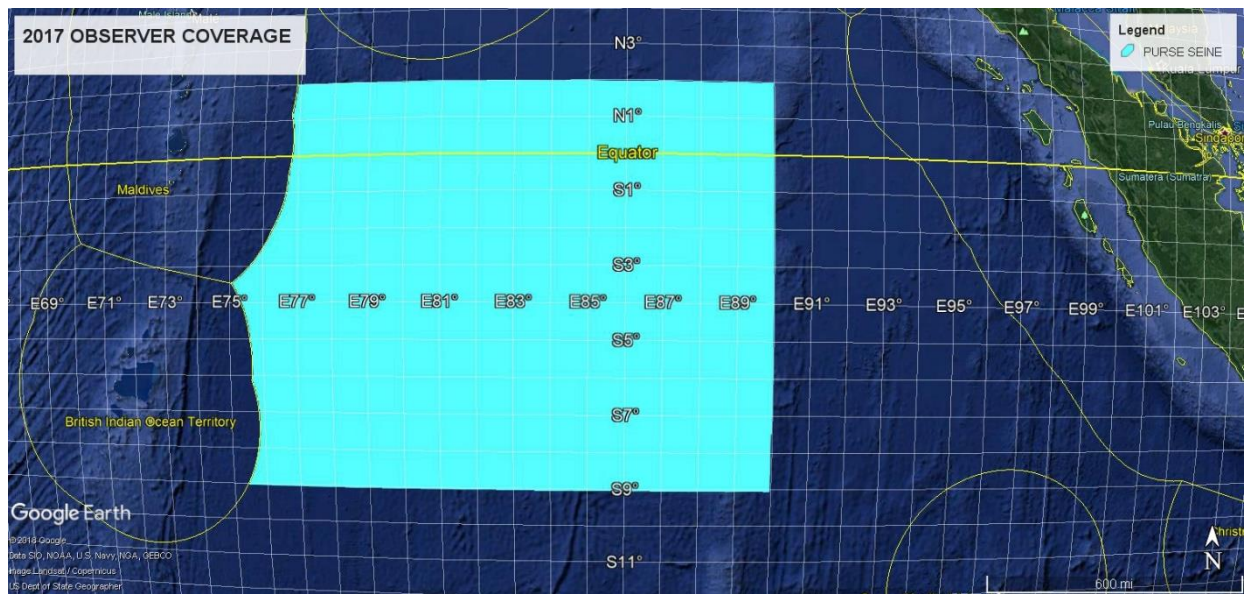


Figure 3. Map showing the spatial distribution of observer coverage. The FV Marilou 888 conducted fishing activities in the IOTC Convention area with 100% observer coverage and VMS.

6.4. Port sampling programme

Presently, the official fishery statistics for the Philippines have been compiled by the Philippine Statistics Authority (PSA), based on probability (stratified random sampling by data collectors) and non-probability surveys (interviews by regular PSA staff) surveys, supplemented by secondary data from administrative sources e.g. landings sites and ports (Vallesteros, 2002). Annual Fisheries Statistics for commercial, municipal, inland and aquaculture sectors are published for three year time frames and include volume and value of production by province and by region, information on fish prices and foreign trade statistics. All Catches Landed in General Santos City.

Table 8. Number of individuals measured, by species and gear

Year: 2017

Gear	Species	Total No. of Individual Measured
PS	Yellow fin Tuna (YFT)	626
PS	Big eye Tuna (BET)	316
PS	Skipjack Tuna (SKJ)	2691

PS	Mackerel Scads (MSD)	41
PS	Rainbow Runner (RRU)	14
PS	Bullet Tuna (BLT)	8
PS	Frigate Tuna (FRI)	7
PS	Spotted Oceanic Triggerfish (CNT)	13

6.5. Unloading/Transshipment

The annual tuna catch estimates include all the tuna catch unloaded in Philippine ports regardless where they were caught are counted. All tuna landings in General Santos City fish port is counted, regardless of flag of FV.

BFAR launched the catch documentation scheme in 2014, which requires purse seine, ringnet and longline operators to submit monthly logsheets report, and for the canneries to submit monthly cannery unloading data. BAS is also in the process of implementing the new statistical frames and methodologies in order to address the above issue. All these efforts are geared towards improvement of the country's catch estimates.

The Philippine Tuna Fisheries Catch Estimates Review Workshop last 28-29, 2018 was conducted to review and validate Philippine catch estimates by species and gear type for the year 2017. However, this annual activity is purely for WCPFC data review. Data from different sources, namely, BFAR (NSAP, logsheets, cannery receipts), BAS, PFDA and industry were presented and reviewed. Table below provides a breakdown of catch by gear and species according to the process undertaken in the workshop. The workshop participants noted that while the industrial fleet estimates are now becoming more reliable, there is still a major problem in determining and validating the estimates of the small-scale municipal fisheries that needs to be resolved in the near future. One of the activities done to somehow address this issue was the study conducted in Region 8 and Region 1 to determine the likelihood that hook-and-line vessels at nearby landing sites would catch significant amounts of oceanic tuna species.

6.6. Actions taken to monitor catches & manage fisheries for Striped Marlin, Black Marlin, Blue Marlin and Indo-pacific Sailfish

The Philippines under its Fisheries Code and other subsequent issuances recognizes the prohibition in the catching of sharks, turtles and other species that have been listed under CITES. Fishing vessels authorized to fish in other RFMOs convention areas, complies with the provisions and applicable strategies to mitigate and avoid such mortalities of sharks, turtles and other species.

6.7. Sampling plans for mobulid rays

Through the amended Philippine Fisheries Code (Republic Act Number 8550), the Philippines continue to implement relevant IOTC conservation and management measures as well as Philippine fisheries laws and regulations. The amendments of the Philippine Fisheries Code (Republic Act Number 8550) are for the purpose of elevating the level of penalties to reflect more current international levels of sanctions and new developments which are consistent with our international commitments. With regards to the mobulid rays, however, the Philippines have yet to formulate a concrete sampling plan.

Table 9. Reconciliated catch of skipjack, yellowfin and bigeye for Philippine flagged vessels by gear type and fleet, 2017 (Source: 11th Philippine tuna catch review workshop report)

Fleet/Gear	2017			
	BET	YFT	SKJ	
PH	4,209	74,668	95,331	174,208
Handline	1,290	23,916	3,038	28,244
Hook & line	510	19,529	10,742	30,781
Longline				-
Other	90	4,187	4,878	9,155
Ringnet	611	9,592	27,827	38,030
Purse seine	1,708	17,444	48,846	67,998
DW	1,683	17,188	48,129	67,000
Purse seine	1,683	17,188	48,129	67,000
Grand Total	5,892	91,856	143,460	241,208

Note: PH – Philippine-flagged vessels fishing in Philippine waters and high seas pocket 1 (HSP1), WCPO
DW- Distant-water fleet, Philippine-flagged vessels fishing with access with other coastal states in WCPFC area

7. NATIONAL RESEARCH PROGRAMS

Table 10. Summary table of national research programs

Project title	Period	Funding source	Objectives
Philippine Fisheries Observer Program	2009-present	BFAR	Complement the existing Monitoring, Control and Surveillance program of the country to combat IUUF (through responsible collection and reporting of fishing data from different RFMOs convention areas/high seas/PH EEZ)

8. IMPLEMENTATION OF SCIENTIFIC COMMITTEE RECOMMENDATIONS AND RESOLUTIONS OF THE IOTC RELEVANT TO THE SC.

Table 11. Scientific requirements contained in Resolutions of the Commission, adopted between 2012 and 2020

Res. No.	Resolution	Scientific requirement	CPC progress
11/04	On a regional observer scheme	Paragraph 9	Section 38 of Republic Act 8550 as amended by Republic Act Number 10654 requires all fishing vessels to keep a record of fish catch and spoilage, landing points, and quantity and value of fish caught, and off-loaded for transshipment, sale and/ or other disposal.



Res No.	Resolution	Scientific requirement	CPC progress
			The Philippines has a regional observer program. The FV Marilou 888 operated in the convention area with 100% observer coverage.
12/04	On the conservation of marine turtles	Paragraphs 3, 4, 6-10	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states. Previously, FAO was promulgated.
12/06	On reducing the incidental bycatch of seabirds in longline fisheries.	Paragraphs 3-7	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states. Previously, FAO was promulgated.
12/09	On the conservation of thresher sharks (family alopiidae) caught in association with fisheries in the IOTC area of competence	Paragraphs 4-8	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states. Previously, FAO was promulgated.
13/04	On the conservation of cetaceans	Paragraphs 7- 9	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states. Previously, FAO was promulgated.
13/05	On the conservation of whale sharks (<i>Rhincodon typus</i>)	Paragraphs 7- 9	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.
13/06	On a scientific and management framework on the conservation of shark species caught in association with IOTC managed fisheries	Paragraph 5-6	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of



Res No.	Resolution	Scientific requirement	CPC progress
			<p>the Department, the RFMO, or other coastal states.</p> <p>Some BFAR activities on shark measures: -Shark Conservation IEC Events in Dinagat Island (February 20-21,2018) -Philippine Aquatic Wildlife Rescue and Response Manual Series: Shark and Rays (NFRDI, BFAR, MWWP) -BFAR urging the local government to regulate, if not ban, the catching and sale of juvenile sharks (Bacolod City, 2016)</p>
15/01	On the recording of catch and effort by fishing vessels in the IOTC area of competence	Paragraphs 1-10	Section 38 of Republic Act 8550 as amended by Republic Act Number 10654 requires all fishing vessels to keep a record of fish catch and spoilage, landing points, and quantity and value of fish caught, and off-loaded for transshipment, sale and/ or other disposal.
15/02	Mandatory statistical reporting requirements for IOTC Contracting Parties and Cooperating Non-Contracting Parties (CPCs)	Paragraphs 1-7	<p>Section 38 of Republic Act 8550 as amended by Republic Act Number 10654 requires all fishing vessels to keep a record of fish catch and spoilage, landing points, and quantity and value of fish caught, and off-loaded for transshipment, sale and/ or other disposal.</p> <p>Fishing vessel operators are instructed to submit data to Bureau of Fisheries and Aquatic Resources [BFAR] on a monthly basis. These were then seasonably sent to the IOTC. This is a requirement under RA 8550 as amended by RA 10654 as well as BFAR Circular Number 252 Series of 2014 required the fishing vessel will comply with the rules and regulations of the RFMO which has jurisdiction over the high seas pocket or the Coastal State which has jurisdiction over the waters where they operate and Fisheries Administrative Order Number</p>
17/05	On the conservation of sharks caught in association with fisheries managed by IOTC	Paragraphs 6, 9, 11	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.
18/	On management measures for the	Paragraphs 2-5	Section 33 of Republic Act 8550 as amended



Res . No.	Resolution	Scientific requirement	CPC progress
02	conservation of blue shark caught in association with IOTC fisheries		by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.
18/05	On management measures for the conservation of the Billfishes: Striped marlin, black marlin, blue marlin and Indo-Pacific sailfish	Paragraphs 7 – 11	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.
18/07	On measures applicable in case of non-fulfilment of reporting obligations in the IOTC	Paragraphs 1, 4	<p>Section 38 of Republic Act 8550 as amended by Republic Act Number 10654 requires all fishing vessels to keep a record of fish catch and spoilage, landing points, and quantity and value of fish caught, and off-loaded for transshipment, sale and/ or other disposal.</p> <p>Fishing vessel operators are instructed to submit data to Bureau of Fisheries and Aquatic Resources [BFAR] on a monthly basis. These were then seasonably sent to the IOTC. This is a requirement under RA 8550 as amended by RA 10654 as well as BFAR Circular Number 252 Series of 2014 required the fishing vessel will comply with the rules and regulations of the RFMO which has jurisdiction over the high seas pocket or the Coastal State which has jurisdiction over the waters where they operate and Fisheries Administrative Order Numbe</p>
19/01	On an Interim Plan for Rebuilding the Indian Ocean Yellowfin Tuna Stock in the IOTC Area of Competence	Paragraph 22	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.
19/03	On the Conservation of Mobulid Rays Caught in Association with Fisheries in the IOTC Area of Competence	Paragraph 11	Section 33 of Republic Act 8550 as amended by Republic Act Number 10654 requires Distant water fishing vessels shall comply with the monitoring, control and surveillance



Res No.	Resolution	Scientific requirement	CPC progress
			requirements, conservation and management measures, and fishing access conditions of the Department, the RFMO, or other coastal states.

9. LITERATURE CITED

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